

Amendments to the Claims

Please amend Claims 11, 14, 15, 17, 19, 21-23, 25, 27, 29-31 and 33 to read as follows.

Claims 1-10 (Cancelled)

11. (Currently Amended) An ink jet printing apparatus for printing on a printing medium with a printing head for ejecting ink, said apparatus comprising:

feeding means for feeding the printing medium toward the printing head;

conveying means for conveying intermittently the printing medium fed by said

feeding means to a position opposite to the printing head;

scanning means for scanning the printing head in a scanning direction different from a ~~feeding~~ conveying direction of the printing medium ~~fed~~ conveyed by said ~~feeding~~ conveying means;

detection means for detecting an edge of the printing medium fed by said feeding means; and

control means for controlling the driving of said feeding means so as to (1) cause said feeding means to initiate the feeding of a succeeding printing medium after said feeding means initiates the feeding of a preceding printing medium and before said detection means detects a trailing edge of the preceding printing medium and (2) cause a leading edge of the succeeding printing medium to arrive at said detection means after said detection means detects the trailing edge of the preceding printing medium.

12. (Previously Presented) An ink jet printing apparatus according to claim 11, wherein on the basis of information specifying the length in the feeding direction of the preceding printing medium, said feeding means initiates the feeding of the succeeding printing medium.

13. (Previously Presented) An ink jet printing apparatus according to claim 11, wherein feeding control by said control means is executed when determined that the feeding of the succeeding printing medium is necessary during printing on the preceding printing medium.

14. (Currently Amended) An ink jet printing method for printing on a printing medium by scanning a printing head for ejecting ink, said method comprising the steps of:

feeding a printing medium toward the printing head;

conveying intermittently the printing medium fed in said feeding step to a position opposite to the printing head;

scanning the printing head in a scanning direction different from a ~~feeding~~ conveying direction of the printing medium conveyed in said conveying step;

initiating the feeding of a succeeding printing medium toward the printing head after the feeding of a preceding printing medium is initiated and before a trailing edge of the preceding printing medium is detected at a predetermined position; and

feeding the succeeding printing medium so that a leading edge of the succeeding printing medium arrives at the predetermined position after the trailing edge of the preceding printing medium is detected at the predetermined position.

15. (Currently Amended) An ink jet printing apparatus for printing on a printing medium with a printing head for ejecting ink, said apparatus comprising:

feeding means for feeding the printing medium toward the printing head;

conveying means for conveying intermittently the printing medium fed by said

feeding means to a position opposite to the printing head;

scanning means for scanning the printing head in a scanning direction different from a ~~feeding~~ conveying direction of the printing medium ~~fed~~ conveyed by said ~~feeding~~ conveying means;

detection means for detecting an edge of the printing medium fed by said feeding means; and

control means for controlling the driving of said feeding means so as to cause said feeding means to initiate the feeding of a succeeding printing medium after said feeding means initiates the feeding of a preceding printing medium and before said detection means detects a trailing edge of the preceding printing medium,

wherein said control means causes said feeding means to initiate the feeding of the succeeding printing medium on the basis of information specifying the length in the feeding direction of the preceding printing medium.

16. (Previously Presented) An ink jet printing apparatus according to claim 15, wherein feeding control by said control means is executed when determined that the feeding of the succeeding printing medium is necessary during printing on the preceding printing medium.

17. (Currently Amended) An ink jet printing apparatus for printing on a printing medium with a printing head for ejecting ink, said apparatus comprising:

feeding means for feeding the printing medium toward the printing head;

conveying means for conveying intermittently the printing medium fed by said feeding means to a position opposite to the printing head;

scanning means for scanning the printing head in a scanning direction different from a ~~feeding~~ conveying direction of the printing medium ~~fed~~ conveyed by said ~~feeding~~ conveying means;

detection means for detecting an edge of the printing medium fed by said feeding means; and

control means that (1) causes said feeding means to initiate the feeding of a succeeding printing medium on the basis of information specifying the length in the feeding direction of a preceding printing medium, after said feeding means initiates the feeding of the preceding printing medium and before said detection means detects a trailing edge of the preceding printing medium, and (2) thereby causes a leading edge of the succeeding printing medium to arrive at said detection means after said detection means detects the trailing edge of the preceding printing medium.

18. (Previously Presented) An ink jet printing apparatus according to claim 17, wherein feeding control by said control means is executed when determined that the feeding of the succeeding printing medium is necessary during printing on the preceding printing medium.

19. (Currently Amended) A method of feeding a printing medium in an ink jet printing apparatus for printing on the printing medium with a printing head for ejecting ink, said method comprising the steps of:

feeding the printing medium toward the printing head;

conveying intermittently the printing medium fed in said feeding step to a position opposite to the printing head;

scanning the printing head in a scanning direction different from a ~~feeding~~ conveying direction of the printing medium conveyed in said conveying step;

detecting an edge of the printing medium fed in said feeding step by edge detection means at a predetermined position; and

controlling a feeding operation in said feeding step so as to (1) cause initiation of the feeding of a succeeding printing medium after the feeding of a preceding printing medium is initiated in said feeding step and before a trailing edge of the preceding printing medium is detected at the predetermined position and (2) cause a leading edge of the succeeding printing medium to arrive at the predetermined position after the trailing edge of the preceding printing medium is detected at the predetermined position.

20. (Previously Presented) A method according to claim 19, wherein based on information specifying the length in the feeding direction of the preceding printing medium, the feeding of the succeeding printing medium is initiated.

21. (Currently Amended) A method of feeding a printing medium in an ink jet printing apparatus for printing on the printing medium with a printing head for ejecting ink, said method comprising the steps of:

feeding the printing medium toward the printing head;

conveying intermittently the printing medium fed in said feeding step to a position opposite to the printing head;

scanning the printing head in a scanning direction different from a ~~feeding~~ conveying direction of the printing medium conveyed in said conveying step;

detecting an edge of the printing medium fed in said feeding step at a predetermined position; and

controlling the feeding operation in said feeding step so as to initiate the feeding of a succeeding printing medium after the feeding of a preceding printing medium is initiated in said feeding step and before a trailing edge of the preceding printing medium is detected at the predetermined position,

wherein in said controlling step the feeding of the succeeding printing medium is initiated on the basis of information capable of specifying the length in the feeding direction of the preceding printing medium.

22. (Currently Amended) A method of feeding a printing medium in an ink jet printing apparatus for printing on the printing medium with a printing head for ejecting ink, said method comprising the steps of:

feeding the printing medium toward the printing head;

conveying intermittently the printing medium fed in said feeding step to a position opposite to the printing head;

scanning the printing head in a scanning direction different from a feeding conveying direction of the printing medium conveyed in said conveying step;

detecting an edge of the printing medium fed in said feeding step at a predetermined position; and

executing control so as to (1) initiate the feeding of a succeeding printing medium in said feeding step based on information specifying the length in the feeding direction of a preceding printing medium, after the feeding of the preceding printing medium is initiated in said feeding step and before a trailing edge of the preceding printing medium is detected at the predetermined position, and (2) thereby cause a leading edge of the succeeding printing medium to arrive at the predetermined position after the trailing edge of the preceding printing medium is detected at the predetermined position.

23. (Currently Amended) An ink jet printing apparatus for printing on a printing medium with a printing head for ejecting ink, said apparatus comprising:

feeding means for feeding the printing medium toward the printing head;

conveying means for conveying intermittently the printing medium fed by said

feeding means to a position opposite to the printing head;

scanning means for scanning the printing head in a scanning direction different from a ~~feeding~~ conveying direction of the printing medium ~~fed~~ conveyed by said ~~feeding~~ conveying means;

detection means for detecting an edge of the printing medium fed by said feeding means; and

control means for controlling the driving of said feeding means so as to cause said feeding means to initiate the feeding of a succeeding printing medium after said feeding means initiates the feeding of a preceding printing medium and before said detection means detects a trailing edge of the preceding printing medium.

24. (Previously Presented) An ink jet printing apparatus according to claim 23, wherein feeding control by said control means is executed when determined that the feeding of the succeeding printing medium is necessary during printing on the preceding printing medium.

25. (Currently Amended) A method of feeding a printing medium in an ink jet printing apparatus for printing on the printing medium with a printing head for ejecting ink, said method comprising the steps of:

feeding the printing medium toward the printing head;

conveying intermittently the printing medium fed in said feeding step to a position opposite to the printing head;

scanning the printing head in a scanning direction different from a ~~feeding~~ conveying direction of the printing medium conveyed in said conveying step;

detecting an edge of the printing medium fed in said feeding step by edge detection means; and

controlling the feeding operation in said feeding step so as to initiate the feeding of a succeeding printing medium after the feeding of a preceding printing medium is initiated in said feeding step and before the edge detection means detects a trailing edge of the preceding printing medium.

26. (Previously Presented) An inkjet printing apparatus according to claim 11, wherein said feeding means comprises a feed roller for feeding the printing medium from a printing medium storing unit, and said detection means comprises a single unit set between said feed roller and the printing head along a conveyance path of the printing medium.

27. (Currently Amended) An ink jet printing apparatus according to claim 11, wherein said control means determines whether the leading edge of the succeeding printing medium has been ~~conveyed~~ fed to arrive at a predetermined position upstream of said detection means along a conveyance path, wherein when the leading edge of the succeeding printing medium has been ~~conveyed~~ fed to arrive at the predetermined position, said control means determines whether the trailing edge of the preceding printing medium

has passed said detection means, and wherein when the trailing edge of the preceding printing medium has not passed said detection means, said control means interrupts the feeding of the succeeding printing medium.

28. (Previously Presented) An inkjet printing apparatus according to claim 15, wherein said feeding means comprises a feed roller for feeding the printing medium from a printing medium storing unit, and said detection means comprises a single unit set between said feed roller and the printing head along a conveyance path of the printing medium.

29. (Currently Amended) An ink jet printing apparatus according to claim 15, wherein said control means comprises calculation means for calculating a position of the trailing edge of the preceding printing medium on the basis of the information specifying the length and information on a conveyance amount that the preceding printing medium has been conveyed by said conveying means after a leading edge of the preceding printing medium passed said detection means, and causes said feeding means to initiate the feeding of the succeeding printing medium based on a result of the calculation by said calculation means.

30. (Currently Amended) An ink jet printing apparatus according to claim 15, wherein said control means determines whether a leading edge of the succeeding printing medium has been ~~conveyed~~ fed to arrive at a predetermined position upstream of said detection means along a conveyance path, wherein when the leading edge of the

succeeding printing medium has been ~~conveyed~~ fed to arrive at the predetermined position, said control means determines whether the trailing edge of the preceding printing medium has passed said detection means, and wherein when the trailing edge of the preceding printing medium has not passed said detection means, said control means interrupts the feeding of the succeeding printing medium.

31. (Currently Amended) An ink jet printing apparatus according to claim 17, wherein said control means comprises calculation means for calculating a position of the trailing edge of the preceding printing medium on the basis of the information specifying the length and information on a conveyance amount that the preceding printing medium has been conveyed by said conveying means after a leading edge of the preceding printing medium passed said detection means, and causes said feeding means to initiate the feeding of the succeeding printing medium based on a result of the calculation by said calculation means.

32. (Previously Presented) An inkjet printing apparatus according to claim 23, wherein said feeding means comprises a feed roller for feeding the printing medium from a printing medium storing unit, and said detection means comprises a single unit set between said feed roller and the printing head along a conveyance path of the printing medium.

33. (Currently Amended) An ink jet printing apparatus according to claim 23, wherein said control means determines whether a leading edge of the succeeding printing

medium has been ~~conveyed~~ fed to arrive at a predetermined position upstream of said detection means along a conveyance path, wherein when the leading edge of the succeeding printing medium has been ~~conveyed~~ fed to arrive at the predetermined position, said control means determines whether the trailing edge of the preceding printing medium has passed said detection means, and wherein when the trailing edge of the preceding printing medium has not passed said detection means, said control means interrupts the feeding of the succeeding printing medium.